Subt. For, PTO-1449

INFORMATION DISCLOSURE IN AN APPLICATION

(Use several sheets if necessary)

Docket Number	Application Number
HYZ-050CP2	09/412,947

Applicant: Agrawal

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Filing Date	Group Art Unit
October 05, 1999	1635

U.S. Patent Documents

EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
	4,309,404	1/5/1982	DeNeale et al.	424	21	
	4,309,406	1/5/1982	Guley et al.	424	21	
	4,556,552	12/3/1985	Porter et al.	424	32	
	4,704,295	11/3/1987	Porter et al.	427	3	
	5,220,007	12/21/1993	Cho-Chung	424	450	
	5,271,941	12/21/1993	Cho-Chung	424	450	
	5,470,967	11/28/1995	Huie et al.	536	24.3	
	5,652,355	7/29/1997	Metelev et al.	536	24.5	
	5,969,117	10/19/1999	Agrawal	536	22.1	

Foreign Patent Documents

EXAMINER INITIAL	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION YES	TRANSLATION NO
✓	0 490 077 A1	10/21/1991	EP	C12N 15	11		X
✓	94/17189	8/4/1994	WO	C12N 15	54		X
✓	94/23028	10/13/1994	WO	C12N 15	11		X
✓	96/16976	6/6/1996	WO	C07H 21	02		X
	96/31600	10/10/1996	WO	C12N 15	11		X
	97/11171	3/27/1997	WO	C12N 15	11		X

Other Documents (Including Author, Title, Date Pertinent Pages, Etc.)

A1	Agrawal and Goodchild, "Oligodeoxynucleodise Methylphosphonates: Synthesis and Enzymic Degradation." *Tet. Lett.*, Vol. 28, No. 31, pp. 3539-3542 (1987)
A2	Agrawal and Zhang, "Pharmacokinetics and Bioavailability of Antisense Oligonucleotides Following Oral and Colorectal Administrations in Experimental Animal" In: Antisense Research and Application, S. T. Crooke, ed., Handbook of Experimental Pharmacology, Springer, Berlin, pp. 525-543 (1998)
A3	Agrawal et al., "Oligodeoxynucleoside phosphoramidates and phosphorothioates as inhibitors of human immunodeficiency virus." *Proc. Natl. Acad. Sci.* (USA), Vol. 85, pp. 7079-7083 (1988)
A4	Agrawal et al., "Antisense oligonucleotides as antiviral agents." *Trends Biotechnol.*, Vol. 10, pp. 152-158 (1992)
A5	Beaucage, Serge L., "Oligodeoxyribonucleotides Synthesis," *Meth. Mol. Biol.*, Vol. 20, pp. 33-61 (1993) Humana Press, Totowa, N J. in Protocols for Oligonucleotide Analogs,
A6	Beaucage, in Protocols for Oligonucleotides and Analogs; Synthesis and Properties Agrawal (ed.), Humana Press, Totowa, NJ, pp. 33-62 (1993)

duplicate of A5 reference

EXAMINER	DATE CONSIDERED
	6-14-01

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	B1	Beebe et al. "Cyclic Nucleotides-Dependent Protein Kinases" in The Enzymes: Control by Phosphorylation, Academic Press, NY, Vol. 17, No. A, pp. 43-111 (1986)
	B2	Bergot et al. "Separation of synthetic phoshorothioate oligodeoxynucleotides from their oxygenated (phosphodiester) defect species by strong-anion-exchange high-performance liquid chromatography." *J. Chromatog.*, Vol. 559, pp. 35-42 (1992)
	B3	Buckheit *et al*, "Characterization of an HIV-1 Isolated Displaying an Apparent Absence of Virion-Associated Reverse Transcriptase Activity." *AIDS Research and Human Retroviruses*, Vol. 7, No. 3, pp. 295-302 (1991)
	B4	Cadd et al., "Holoenzymes of cAMP-dependent protein kinase containing the neural form of type I regulatory subunit have an increased sensitivity to cyclic nucleotides." *J. Biol. Chem.*, Vol. 265, pp. 19502-19506 (1990)
	B5	Cambell et al., "Oligodeoxynucleoside phosphorothioate stability in subcellular extracts, culture media, sera and cerebrospinal fluid." *Biochem. Biophys. Meth.*, Vol. 20, pp. 259-267 (1990)
	B6	Cheng et al., "An active twenty-amino-acid-residue peptide derived from the inhibitor protein of the cyclic AMP-dependent protein kinase." *Biochem J.*, Vol. 231, No. 3, pp. 655-661 (1985)
	B7	Cho-Chung, YS, "Hypothesis. Cyclic AMP and its receptor protein in tumor growth regulation in vivo."*J. Cyclic Nucleotide Res.*, Vol. 6, pp. 163-167 (1980)
	B8	Cho-Chung, YS, "Role of cyclic AMP receptor proteins in growth, differentiation, and suppression of malignancy: new approaches to therapy." *Cancer Res.*, Vol. 50, pp. 7093-7100 (1990)
	B9	Cho-Chung et al., *Curr. Opin. Thera. Patents*, Vol. 3, pp. 1737-1750 (1993)
	B10	Ciardiello and Tortora, "Interactions between the Epidermal Growth Factor Receptor and Type I Protein Kinase A: Biological Significance and Therapeutic Implications." *Clin. Cancer Res.*, Vol. 4, pp. 821-828 (1998)
	B11	Clegg et al., "Genetic characterization of a brain-specific form of the type I regulatory subunit of cAMP-dependent protein kinase" *Proc. Natl. Acad. Sci.* (USA), Vol. 85, pp. 3703-3707 (1988)
	B12	Ekanager et al., "The Seprate Estimation of cAMP Intracellularly Bound to the Regulatory Subunits of Protein Kinase I and II in Glucagon-stimulated Rat Hepatocytes." *J. Biol. Chem*, Vol. 260, pp. 3393-3401 (1985)
		Fokman Judah, "Tumor Angiogensis," In: J. Mendelsohn *et al.*, eds., *The Molecular Basis of Cancer*, pp. 206-232, Philadelphia: WB Saunders (1995)
	B14	Froehler, Brian C., "Deoxynucleoside H-Phosphonate Diester Intermediates in the Synthesis of Internucleotide Phosphate Analogues." *Tetrahedron Lett.*, Vol. 27,pp. 5575-5578 (1986)
	B15	Galbraith et al. "Complement Activation and Hemodynamic Changes Following Intravenous Administration of Phosphorothioate Oligonucleotides in the Monkey" *Antisense Research and Development*, Vol. 4, pp. 201-206 (1994)

EXAMINER	DATE CONSIDERED
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	C1	Goldstein *et al.*, "Biological Efficacy of a Chimeric Antibody to the Epidermal Growth Factor Receptor in a Human Tumor Xenograft Model." *Clin. Cancer Res.*, Vol. 1, No. 11, pp. 1311-1318 (1995)
	C2	[illegible] *Bioconjugate Chem.* [illegible], pp. 165-187 (1990)
	C3	Henry et al. Pharm. Res. 11: PPDM8082 (1994)
	C4	[illegible]
	C5	Iyer et al., "A Novel Nucleoside Phosphoramidite Synthon Derived From 1*R*, 2iS – Ephedrine." *Tetrahedron Asymmetry*, Vol. 6, pp. 1051-1054 (1995)
	C6	Kabat and Mayer [illegible] Thomas, p. 125
	C7	Kemp et al., "Role of Multiple Basis Residues in Determining the Substrated Specificity of Cyclic AMP-dependent Protein Kinase." *J. Biol. Chem.*, Vol. 252, pp. 4888-4894 (1977)
	C8	Krebs, Edwin, "Protein Kinases" *Curr. Topics Cell. Regul.*, Vol. 5, pp. 99-133 (1972)
	C9	Loda *et al.*, "Increased proteasome-dependent degradation of the cyclin-dependent kinase inhibitor p27 in aggressive colorectal carcinomas." *Nature Medicine*, Vol. 3, pp. 231-234 (1997)
	C10	Lohmann and Walter, "Regulations of the Cellular and Subcellular Concentrations and Distribution of Cyclic Nucleotide-Dependent Protein Kinases." *Advances in Cyclic Nucleotide and Protein Phosphorylation Research*, Vol. 18, pp. 63-117, Raven, New York, (1984)
	C11	Lu et al., "In vivo stability, pharmacokinetics, and metabolism of a "hybrid" oligonucleotide phosphorothioates in rats" *Proc. Annu. Meet. Am. Assoc. Cancer Res.*, Vol. 36, p. 411 (Abstract 2450) (1995)
	C12	Mantel, "Evaluation of survival data and two new rank order statistics arising in its consideration." *Cancer Chem. Rep.*, Vol. 50, No, 3, pp. 163-170 (1966)
	C13	Monia et al., "Evaluation of 2' –Modified Oligonucleotides Containing 2'-Deoxy Gaps as Antisense Inhibitors of Gene Expression." *Journal of Biological Chemistry*, Vol. 268, pp. 14514-145222 (1993)
	C14	Nara and Fischinger, "Quantitative infectivity assay for HIV-1 and HIV-2." *Nature*, Vol. 332, pp. 469-470 (1988)
	C15	Nesterova and Cho-Chung, "A single-injection protein kinase A-directed antisense treatment to inhibit tumor growth." *Nature Med.*, Vol. 1, pp. 528-533 (1995)
	C16	Nigg et al., "Cyclic-AMP-Dependent Protein Kinase Type II Is Associated with the Golgi Complex and with Centrosomes." *Cell*, Vol. 41, pp. 1039-1051 (1985)
	C17	Øyen et al., " A unique mRNA species for a regulatory subunit of cAMP-dependent protein kinase is specifically induced in haploid germ cells." *FEBS Lett.*, Vol. 229, pp. 391-394 (1988)

EXAMINER	DATE CONSIDERED
Janet E. [illegible]	6-15-01

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See AQ on 5-14-01 IDS

B1 of 5-14-01 IDS

B2 5-14-01 IDS

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	D1	Padmapriya et al., "Large-Scale Synthesis, Purification, and Analysis of Oligodeoxynucleotide Phosphorothioates." *Antisense Res. & Dev.*, Vol. 4, pp. 185-199 (1994)
JE	D2	Pisetsky et al., "Stimulation of *in vitro* proliferation of murine lymphocytes by synthetic oligodeoxynucleotides" *Molecular Biology Report*, Vol. 18, pp. 217-221 (1993)
	D3	Remington's Pharmaceutical Sciences (18th ed.) Genarro, ed., Mack Publishing Co., Easton, PA, (1990)
	D4	Rohlff et al., "8-Cl-cAMP induces truncation and down-regulation of the RI alpha subunit and up-regulation of the RII beta subunit of cAMP-dependent protein kinase leading to type II holoenzyme-dependent growth inhibition and differentiation of HL-60 leukemia cells." *J. Biol. Chem.*, Vol. 268, pp. 5774-5782 (1993)
	D5	Roskoski, Robert, "Assays of Protein Kinase" *Methods Enzymol.*, Vol. 99, pp. 3-6 (1983)
	D6	Salomon, "Epidermal growth factor-related peptides and their receptors in human malignancies" *Crit. Rev. Oncol. Hematol.*, Vol. 19, pp. 183-232 (1995)
	D7	Slapak et al. in Harrison's Principles of Internal Medicine (Isselbacher et al., eds.) McGraw-Hill, Inc., NY, pp. 1826-1850 (1994)
	D8	Tagliaferri et al., "Reverse Transformation of Harvey Murine Sarcoma Virus-transformed NIH/3T3 Cells by Site-selective Cyclic AMP Analogs." *J. Biol. Chem.*, Vol. 263, pp. 409-416 (1988)
	D9	Tortora et al., "An antisense oligodexynucleotide targeted against the type II_β regulatory subunit mRNA of protein kinase inhibits cAMP-induced differentiation in HL-60 leukemia cells without affecting phorbol ester effects." *Proc. Natl. Acad. Sci.* (USA), Vol. 87, pp. 705-708 (1990)
	D10	Uhler et al. "Expression of cDNAs for two isoforms of the catalytic subunit of cAMP-dependent protein kinase." *J. Biol. Chem.*, Vol. 262, pp. 15202-15207 (1987)
dup	[redacted]	
	D12	Weidner, "Current pathologic methods for measuring intratumoral microvessel denstiy within breast carcinoma and other solid tumors" *Breast Cancer Res. Treat.*, Vol. 36, pp. 169-180 (1995)
	D13	Yu et al., "Hybrid Oligonucleotides: Synthesis, Biophysical Properties, Stability Studies, and Biological Activity" *Bioorganic & Medicinal Chemistry*, Vol. 4, No. 10, pp. 1685-1692 (1996)
	D14	Zamecnik and Stephenson, "Inhibition of Rous sarcoma virus replication and cell transformation by a specific oligodeoxynucleotide." *Proc. Natl. Acad. Sci.* (USA), Vol. 75, pp. 280-284 (1978)
dup	[redacted]	
	D16	Zhao et al., "Effect of Different Chemically Modified Oligodeoxynucleotides on Immune Stimulation" *Biochemical Pharmacology*, Vol. 51., pp. 173-182 (1996)

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